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ERT Document No: D495-005
ERT Reference No: 121-SCG-108

February 23, 1988

Ms. Barbara Newman
United States Environmental Protection Agency
Region I
JFK Federal Building
Boston, MA 02203-2211

Dear Ms. Newman:

Enclosed please find a copy of ERT's February 8, 1988 letter to Dr. John Cherry, discussing the upcoming deep bedrock aquifer test in Woburn. Also enclosed is a map indicating the surveyed elevations of the wells recently installed by ERT.

Please let me know if you have any questions regarding the upcoming aquifer test.

Sincerely,

Sharron C. Gaudet

Sharron C. Gaudet
Water Resources Engineer

SCG/lw

enclosure

cc: J. Bates, Goodwin, Procter & Hoar
J. Lawson, ERT

bcc: D. Young
W. Henderson
S. Perry
S. Olney
T. Cosgrave

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ERT Document No. D495-005
ERT Reference No. 121-SCG-104

February 8, 1988

John A. Cherry, Ph.D.
Institute for Ground-Water Research
University of Waterloo
200 University Avenue West
Waterloo, Ontario N2L361

Dear Dr. Cherry:

As you know, ERT is planning to conduct a deep bedrock aquifer test at the UniFirst site in Woburn, Massachusetts. Jeff Lawson presented the preliminary plans for this aquifer test in his letter to Ms. Barbara Newman dated January 7, 1988. The purpose of this letter is to inform you of our current plans for the deep bedrock aquifer test.

The attached map indicates the 17 wells we propose to monitor while pumping UC22. All of the proposed monitoring wells are screened in bedrock. All but UC7A will be monitored using pressure transducers and Hermits from In-Situ. UC7A will be monitored using a small electric water-level tape since it is a Solinst water level well. During the aquifer test, GeoTrans (Grace's consultant) will monitor additional wells on and near the Grace site. They will provide copies of data they collect.

Prior to conducting the aquifer test we plan to install transducers and Hermits in the 4 wells along the western boundary of the Grace property (GW1, 21, GW12, and GW3). Water levels in these wells will be recorded every half hour for one week under undisturbed conditions (no pumping) in order to determine the background variability of these water levels. During the aquifer test, ERT will continue to monitor water levels in these wells and will immediately discontinue pumping UC22 if a drawdown response is observed in any of the 4 wells. The minimum drawdown indicating a response in one of these wells, will be determined in advance based on the water level fluctuations observed under undisturbed conditions.

We are currently planning to conduct the aquifer test on the following schedule:

2/12	Install transducers and Hermits in 4 wells near Grace
2/12-2/19	Monitor water levels in 4 wells near Grace
2/17	Install pump in UC22
2/22-2/23	Install remaining transducers and Hermits Analyze water levels from 2/12-2/19 to determine background variability
2/24	Monitor antecedent conditions
2/25	Step pumping test, vary pumping rate from 10 to 25 gpm
2/26-2/28	Let system recover
2/29-3/2	Pump UC22 at rate determined from results of step pumping test
3/3-3/4	Monitor recovery
3/5	Remove equipment and cleanup

Please let me know if you have any comments or suggestions regarding our selection of observation wells, or the activities we have planned during the test.

Sincerely,

Sharron C Gaudet

Sharron C. Gaudet
Water Resources Engineer

SCG/lw

Attachment

cc: J. Bates
J. Lawson

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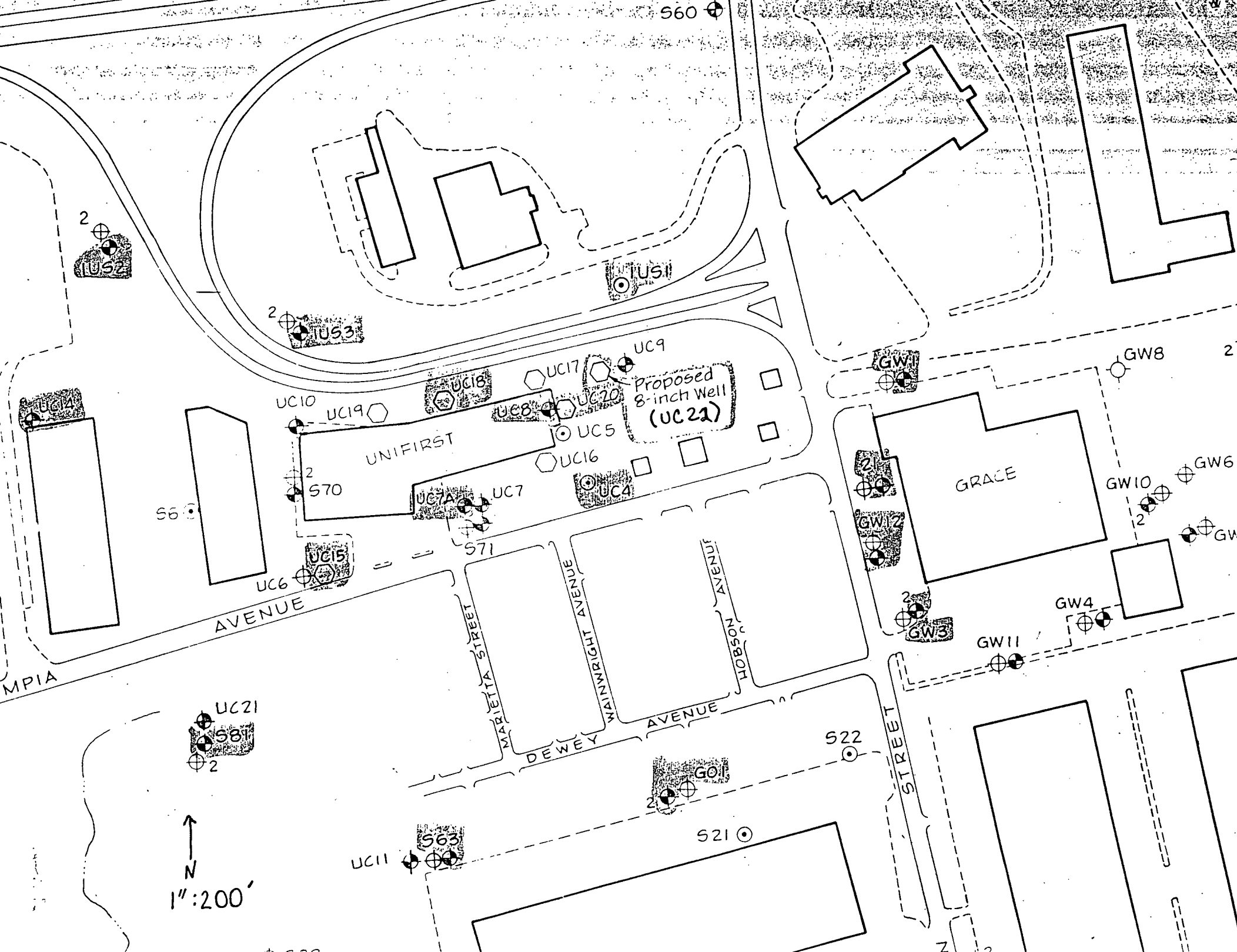
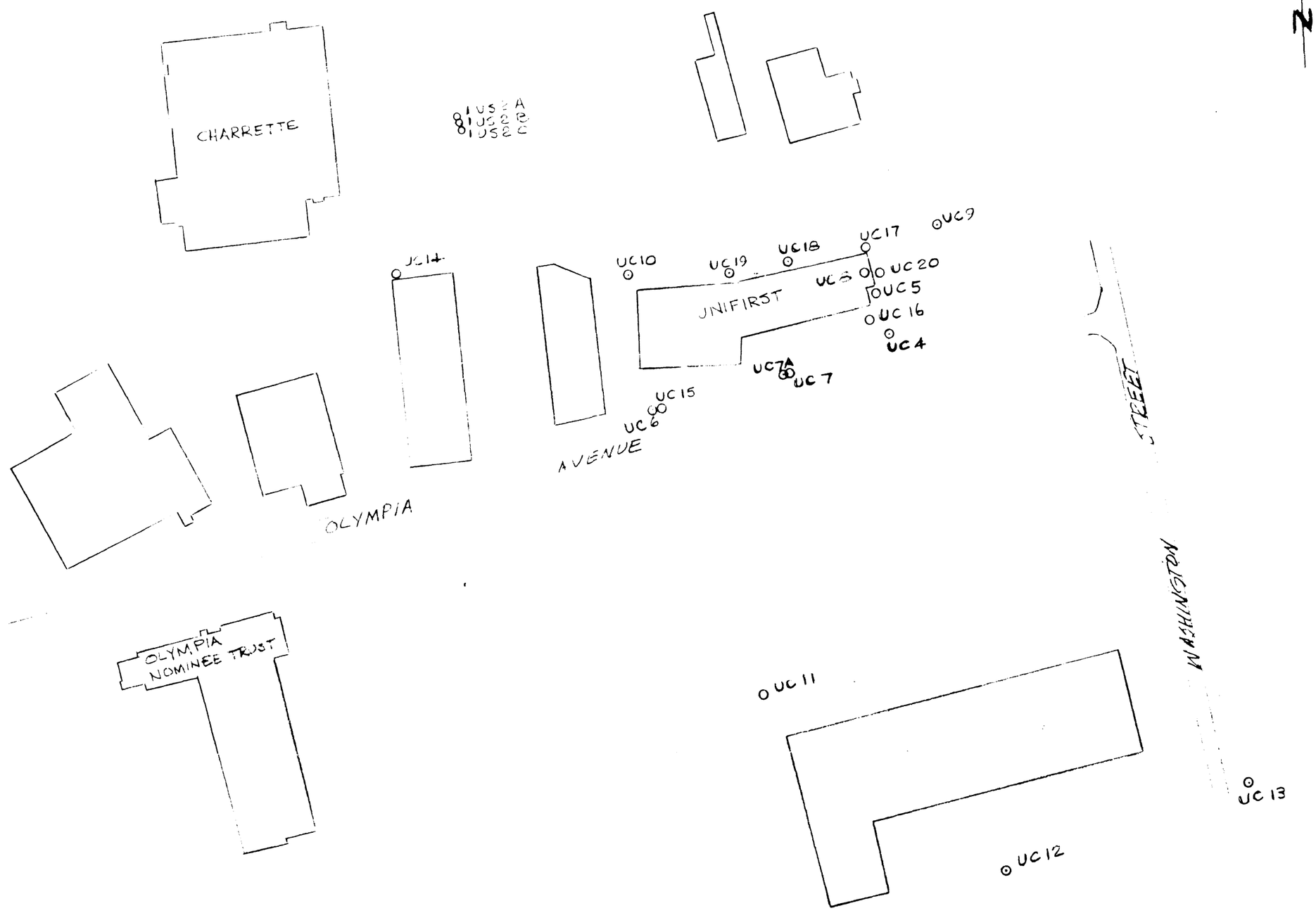

S60
2
IUS2
IUS1
2
IUS3
UC9
UC17
UC18
UC14
UC10
UC19
UC8
UC20
Proposed
8-inch Well
(UC21)
UC5
UNIFIRST
UC16
2
S70
UC7A
UC7
UC4
S6
S71
UC15
UC6
AVENUE
MARIETTA STREET
WAINWRIGHT AVENUE
HOBSON AVENUE
DEWEY AVENUE
UC21
S81
2
S22
GO1
2
S21
UC11
S63
N
1":200'
GW1
GW8
2
GRACE
2
GW12
GW10
GW6
2
GW
2
GW3
GW4
GW11
STREET



WELL	DESCRIPTION	ELEVATION
1 US 2 A	Top lower 'O' Ring	63.33
	Ground	61.3
1 US 2 B	Top lower 'O' Ring	63.17
	Ground	61.5
1 US 2 C	Top lower O Ring	62.93
	Ground	61.3
UC 4		73.67
UC 5		73.04
UC 6		68.39
UC 7		71.03
UC 7A		70.92
UC 8		74.15
UC 9		86.10
	Ground	84.6
UC 10		69.65
UC 11	Rim	70.34
UC 12	Rim	74.81
UC 13		83.25
UC 14	Rim	59.20
UC 15		68.55
UC 16		72.89
UC 17		73.71
UC 18		73.36
UC 19		71.02
UC 20		73.20

SKETCH OF WELLS
OLYMPIA AVENUE
WOBURN, MASS.

HARRY R. FELDMAN, INC. — LAND SURVEYORS
112 SHAWMUT AVENUE — BOSTON, MASS.
1" = 200' — FEB. 10, 1988

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